

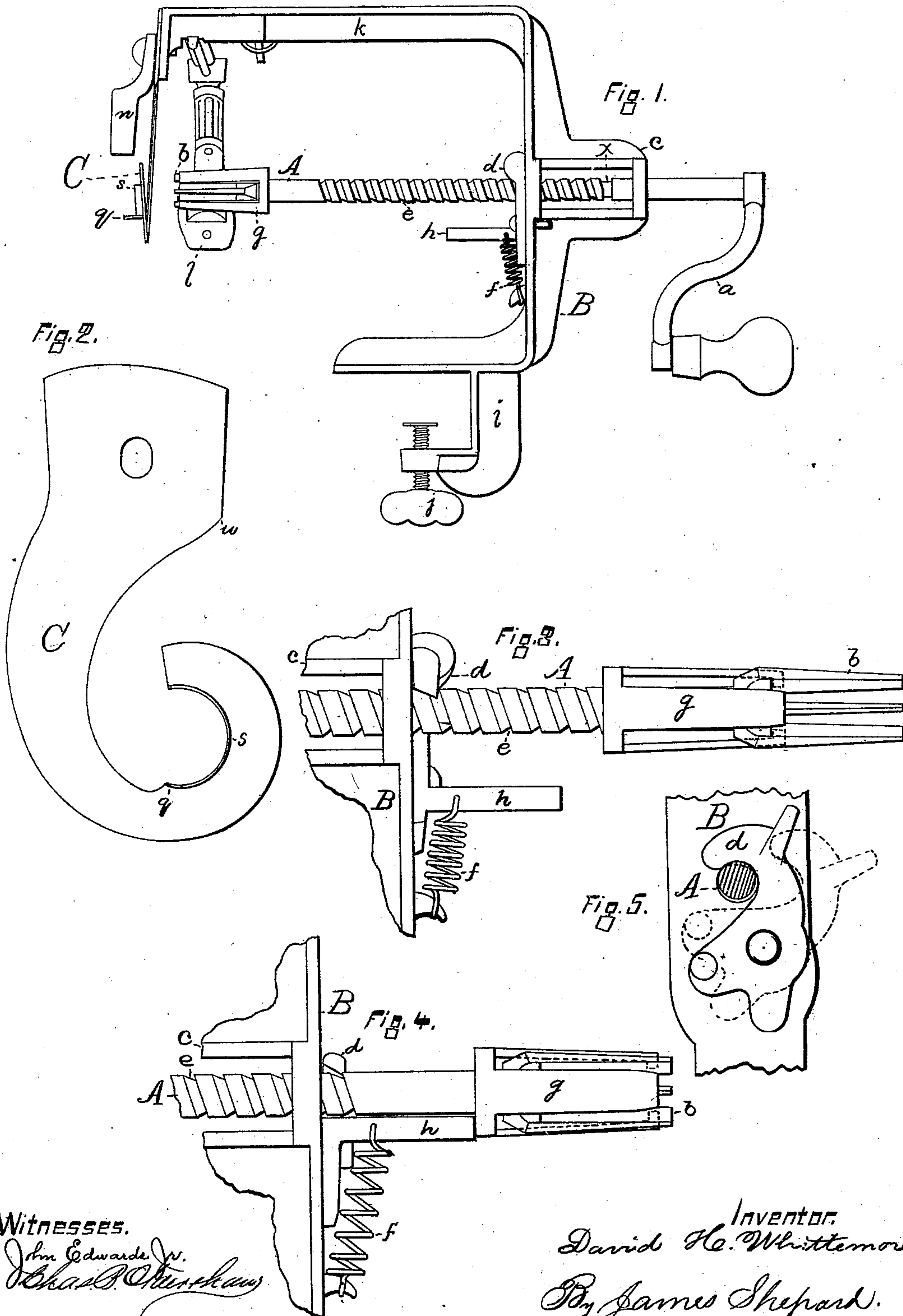
(No Model.)

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APPLE PARER, CORER, AND SLICER.

No. 273,418.

Patented Mar. 6, 1883.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## APPLE PARER, CORER, AND SLICER.

SPECIFICATION forming part of Letters Patent No. 273,418, dated March 6, 1883.

Application filed May 17, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID H. WHITEMORE, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Apple-Parers, of which the following is a specification.

My invention relates to improvements in apple-parers in which a longitudinally-moving screw-shaft is employed in connection with a peculiar stop knock-off, slicing-knife, and frame, all as hereinafter described.

Said improvements are illustrated in the accompanying drawings, in which Figure 1 is a front view of my apple-parer. Fig. 2 is a side view of the slicing and coring knife. Figs. 3 and 4 are rear views of detached parts, illustrating the operation of the knock-off; and Fig. 5 is a side view of detached parts, together with a transverse section of the screw-shaft.

A designates a screw-shaft having both a longitudinal and rotary movement. At one of its ends the operating-crank *a* is secured, and at the opposite end is the fork *b*, by which the apple is held while being pared. This shaft *A* has its bearings and support in the middle portion, *c*, of the frame *B*, and is fitted to slide longitudinally through the bearings in which it revolves. A swinging latch, *d*, is hung to said middle portion, and engages the screw or spiral groove *e* of the shaft *A*. The upper end of this latch is well curved, so as to reach around and extend over the top of the shaft *A* to a point somewhat in the rear of the axis of the latch, so that the forward rotary motion of the shaft will have a tendency to hold said latch into engagement with the screw-shaft without the aid of a spring. If desired, however, a spring, *f*, may be added, as shown in Figs. 1, 3, and 4, to assist in holding the latch in engagement; but it is believed that the latch is practically operative, either with or without the spring. The thread or groove *e* of the screw-shaft runs into the stop-groove *x*, Fig. 1, which extends directly around the shaft. By turning the crank forward when the latch is in the groove *e*, the shaft *A* moves longitudinally forward until the latch runs into the groove *x*.

Upon the end of the shaft which bears the fork *b* is the knock-off *g*, arranged to slide longitudinally back and forth on said shaft from the position shown in Fig. 3 to that

shown in Fig. 4, and return. The knock-off is composed of a solid end, which surrounds the fork-shaft, and three arms which extend lengthwise with the fork-shaft over the head of the fork, where said arms are provided with inwardly-projecting lugs, which lie between the fork-tines. In putting the parts together the three arms are spread open, or left open when cast, and after slipping them over the fork-head they are bent inward into the position shown in the drawings. This construction is quite simple and inexpensive. The knock-off is limited in its movements by the solid end which surrounds the shaft, and the inner lugs (indicated by broken lines) at the opposite end of the knock-off, and the head of the fork. When an apple is placed upon the fork, the knock-off is forced by the apple toward the crank end of the shaft, as shown in Fig. 3. After the apple is pared the latch *d* is held back out of engagement with the shaft *A*, thereby bringing the knock-off stop *h* up into the path of the knock-off. The shaft, with the fork and core thereon, is drawn back when the knock-off *g* is stopped by the knock-off stop *h*. The further backward movement of the shaft draws the fork into the knock-off, as shown in Fig. 4, and clears the fork of the core or apple.

From the middle portion, *c*, of the frame *B* there extends downward below the screw-shaft another part for a clamping-frame, *i*, provided with clamp-screw *j*, by means of which to secure the device in place for use. Another part of the frame *B* extends upward from the middle part, and then horizontally to the left, thereby forming the bar *k*, and to this bar *k* the paring knife *l*, slicing and coring knife *C*, and breaker *n* are secured. The three parts of the frame are rigidly connected in the one frame *B*, as by casting all in one piece, or in any proper manner. The paring-knife is of ordinary construction, and is hung so as to swivel, and also to swing outward, but is secured against moving longitudinally on the bar *k* of the frame *B*. The breaker *o* is older than the invention intended to be protected by this patent. The slicer and coring knife *C* is in scroll form, as shown most clearly in Fig. 2, with a wing, *q*, bent out from the inside of the coil at the small end of the scroll, having one edge sharpened to form a core-



knife, while a short flange, *s*, is also turned out from said coil to form a core-guard. This scroll-shaped knife is bent flatwise, to give it a spiral or helical pitch, as in various other slicer-knives. The inner edge from the corner *u* to the core-knife or wing *q* is sharpened; and it should be noticed that not only is the general form of the complete knife in scroll form, but this cutting-edge is substantially in scroll form, beginning at the point *u*, and extending partially around the axis of the fork to the core-knife *q* upon the opposite side of the axis from the starting-point *u*. The scroll form of this cutting-edge gives a good drawing cut for its whole length, and the construction of the knife is very simple. It is evident that all the advantages of this form of cutting-edge for the slicer-knife will be present whether or not the core-knife and core-guard are formed integral therewith or of a separate piece or pieces. In fact, for some uses I prefer to form the core-guard of cast metal upon a thin plate placed by the side of the slicing-knife. I have described the slicer and coring-knife as in scroll form because of its general appearance as viewed in side view; but it should be noticed that the flange *s*, which forms the core-guard, is on the arc of a circle. The construction of the frame is such that the knives are freed very readily, and neither the parings nor sliced apple will fall upon any part of the frame. The knock-off is one that is very convenient and easy to operate.

I claim as my invention—

35 1. The slicing-knife having its cutting-edge

in scroll form extending partially around the fork-axis to a point opposite the starting-point of said edge, substantially as described, and for the purpose specified.

2. The apple-parer consisting of the slicing 40 and paring knives depending from the horizontal bar *k*, which forms the upper part of the frame B, and secured thereon against moving longitudinally, the screw-threaded fork-shaft arranged parallel to said bar to move 45 longitudinally through the bearings in which it revolves in the middle part, *c*, of the frame, and the clamping-frame *i*, forming the lower part of the frame B, and standing under the crank end only of the bar *k* at a point below 50 the fork-shaft, all substantially as described, and for the purpose specified.

3. The knock-off consisting of the solid end for surrounding the fork-shaft and the three arms which extend over the head of the fork 55 and terminate with the inwardly-projecting lugs, substantially as described, and for the purpose specified.

4. The combination of the longitudinally-moving screw-shaft, the fork secured thereto, 60 the knock-off loosely mounted upon said shaft, and adapted to move longitudinally thereon, the latch for engaging the screw-shaft, and the knock-off stop moving with said latch, substantially as described, and for the purpose 65 specified.

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Witnesses:

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